

Date: Mon, 6 Dec 93 22:37:23 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #1431  
To: Info-Hams

Info-Hams Digest                    Mon, 6 Dec 93                    Volume 93 : Issue 1431

Today's Topics:

    10m sked needed  
    Calculating SWR  
    CQWW-CW QSL routes?  
    Help: dotted decimal address of arrl.org  
    How to Calibrate an SWR meter  
    Identification procedures - unlicensed person  
    Looking for ARRL info ftp site  
    need Pittsburgh area ARC and repeater info  
    Problem subscribing  
    Reusing Tickets...  
    Wanted: 11C90 Prescalar Chip  
    Weird QRM

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----

Date: 6 Dec 93 21:52:33 GMT  
From: ogicse!uwm.edu!math.ohio-state.edu!sdd.hp.com!hpscit.sc.hp.com!  
cupnews0.cup.hp.com!jholly@network.ucsd.edu  
Subject: 10m sked needed  
To: info-hams@ucsd.edu

david jerome adams (djadams@silver.ucs.indiana.edu) wrote:

: Greetings! I've put up a new 10m dipole and would like to try it out  
: this weekend. I'll be calling on USB around 28.350khz between 1500

: and 1600 this saturday....(that should be 28.350Mhz, by the way)...  
: Could anyone with their radios on make a special effort to listen for  
: my call? Thanx.

: 73 de Dave, N9UXU

You should have plenty of company this weekend...it is the ARRL 10M contest.  
Jim,WA6SDM  
jholly@cup.hp.com

---

Date: 1 Dec 93 23:02:23 EST  
From: ucsnews!sol.ctr.columbia.edu!news.kei.com!eff!usenet.ins.cwru.edu!  
lerc.nasa.gov!magnus.acs.ohio-state.edu!cis.ohio-state.edu!pacific.mps.ohio-  
state.edu!ohstpy.mps.ohio-state.edu!miavx1!@  
Subject: Calculating SWR  
To: info-hams@ucsd.edu

In article <754583670.19snx@mu.apana.org.au>, jmorris@mu.apana.org.au (James Morris) writes:  
> In article <1993Nov26.200816.19512@combdyn.com> lawrence@combdyn.com writes:  
>>  
>>How do you calculate SWR? I have a power meter...and I can measure the forward  
>>and reflected power. How to I take the two values to determine the SWR?  
>>  
>>Right now I have forward power of 5 Watts and reflected power of 0.1 Watts,  
>>what SWR would that correspond to?  
>>  
>>--  
>>-----EMAIL-----PHONE-----FAX-----  
>> | WORK: lawrence@combdyn.com | (403)529-2162 | (403)529-2516 | CallSign  
>> | HOME: dreamer@lhaven.uumh.ab.ca | (403)526-6019 | (403)529-5102 | VE6LKC  
>> -----  
>> disclaimer = (working\_for && !representing) + (Combustion Dynamics Ltd.);  
>>  
>  
> I am not trying to be mean, but did you sit a radio theory test for your  
> amateur license ?  
>  
> --  
> jmorris@mu.apana.org.au  
> James Morris VK2GVA

As I recall the (US) ham exams, this topic is not addressed ...  
is it in the Canadian exam? If so, at what level ??

Just curious.

73 >< Carl  
K8NHE

---

Date: 6 Dec 93 18:56:25 GMT  
From: ogicse!cs.uoregon.edu!news.uoregon.edu!fp2-st-affairs-20.uoregon.edu!  
user@network.ucsd.edu  
Subject: CQWW-CW QSL routes?  
To: info-hams@ucsd.edu

Does anyone have a compilation of QSL routes from the CW CQWW test?

Steve/AA7FL  
milewski@oregon.uoregon.edu

---

Date: 6 Dec 93 16:30:32 GMT  
From: ogicse!emory!europa.eng.gtefsd.com!howland.reston.ans.net!news.intercon.com!  
psinntp!arrl.org@network.ucsd.edu  
Subject: Help: dotted decimal address of arrl.org  
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, h11mn@thebard.kci.co.kr (Lee Kwangweon) writes:  
>Hi ?  
>  
>I'm faced difficulty to reach ARRL.  
>Our Name resolution server cannot resolve the address 'arrl.org'.  
>Is anyone who knows the dotted decimal address of 'arrl.org'.  
>Please let me know !

You may want to try DNS again... we're just changing our service arrangement...

In any case, the address is 38.1.219.1

---

-----  
Jon Bloom, KE3Z | jbloom@arrl.org  
American Radio Relay League |  
225 Main St., Newington CT 06111 |

---

Date: Mon, 6 Dec 1993 16:54:01 GMT  
From: sdd.hp.com!sgiblab!swrinde!cs.utexas.edu!howland.reston.ans.net!pipex!uknet!  
bradford.ac.uk!K.E.Walton@network.ucsd.edu

Subject: How to Calibrate an SWR meter  
To: info-hams@ucsd.edu

Hi

I have purchased a cheap SWR meter from a rally, how do I go about calibrating it, How can a get a reading of 0 and/or 100% SWR ?

Thanks

Kevin

--

//// Computer Science Student Email : K.E.Walton@Bradford.AC.UK ////  
//// Bradford University Snail Mail : 38 Fieldhead Street ////  
//// England Bradford, West Yorks, ////  
//// Call Sign : G7PMO ENGLAND, BD7 1LP ////

---

Date: Sat, 4 Dec 1993 03:09:17 GMT  
From: world!drt@uunet.uu.net  
Subject: Identification procedures - unlicensed person  
To: info-hams@ucsd.edu

In article <2dnvd4\$17d5@msuinfo.cl.msu.edu> cravitma@cps.msu.edu (Matthew B Cravit) writes:

I was wondering -- since it is permissible for an unlicensed individual to use a radio in an emergency, and since it is possible that I may be faced with an "official FCC-approved grade A emergency" between now and when the FCC finally gets around to sending me my license, what is the established procedure (if any) for an unlicensed operator to identify him/herself if attempting to obtain emergency help?

Try repeating the word MAYDAY ("m'aider") three times and then stating the nature of the emergency. Only an idiot would insist on call letters before helping you. You still might run into such an idiot who makes you debate the issue, though I can't think of any magic words to avoid that.

It's against regs, and probably a crime, to do this falsely.

-drt

--

---

|David R. Tucker KG2S 8P9CL drt@world.std.com|

---

|`Most political sermons teach the congregation nothing except |

-----  
Date: 6 Dec 93 15:19:01 GMT  
From: ogicse!uwm.edu!vixen.cso.uiuc.edu!howland.reston.ans.net!news.intercon.com!  
psinntp!arrl.org@network.ucsd.edu  
Subject: Looking for ARRL info ftp site  
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, turini@gdls.com (Bill Turini) writes:

>A while back someone posted the address of the ARRL information  
>mirror ftp site.

You are thinking of the ARRL Automated Electronic Mail Server,  
info@arrl.org. Send email to info@arrl.org with the following in the  
body of the message:

help  
index  
quit

We don't have an FTP server running, yet, and we probably won't include  
many of our files when we do. Our current connection speed is compressed  
9600 baud, so FTPing a large file would be SLOW!

We have nearly all of files available from world.std.com, so if you  
want to FTP them at real network speeds, get them from there.

73 and Happy Holidays from ARRL HQ, Ed -- KA1CV

-----  
Ed Hare, KA1CV                                   ehare@arrl.org  
American Radio Relay League  
225 Main St.  
Newington, CT 06111                                 If you tie a strip of colored cloth to  
(203) 666-1541 - voice                             part of your body, the tribe acts  
ARRL Laboratory Supervisor                             differently!  
RFI, xmtr and rcvr testing  
-----

-----  
Date: Thu, 02 Dec 1993 13:10:12 -0600  
From: qualcomm.com!vixen.cso.uiuc.edu!howland.reston.ans.net!math.ohio-state.edu!  
caen!hellgate.utah.edu!cc.usu.edu!sy\_j.pgh.wec.com!user@network.ucsd.edu  
Subject: need Pittsburgh area ARC and repeater info

To: info-hams@ucsd.edu

I'd like to get info about amateur radio clubs in and around the Pittsburgh area (contact person/phone/address). also info as to what areas of interest each ARC caters to, what repeaters they operate, fees, benefits, etc.

will a (2 to 5watt) HT (using a different antenna other than the stock rubber dummy) be sufficient to use in the hilly terrain of the Pittsburgh area for home and mobile use ?

please email replies if possible.  
thanks in advance  
Jerry

--  
"Beware of bugs in the above code; I have only proved it correct, not tried it."

-- Donald Knuth

---

Date: 6 Dec 93 22:59:03 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Problem subscribing  
To: info-hams@ucsd.edu

I have been trying to subscribe to this list by typing:  
subscribe info-hams Kevin Muenzler  
and sending it to listserv@ucsd.edu

What am I doing wrong?  
Kevin Muenzler  
muenzlerk@uthscsa.edu

---

Date: 3 Dec 93 15:50:35 -0600  
From: pravda.sdsc.edu!news.cerf.net!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!  
uwm.edu!news.doit.wisc.edu!uwec.edu!whitemp@network.ucsd.edu  
Subject: Reusing Tickets...  
To: info-hams@ucsd.edu

So tell me, does the FCC recycle?

At one time, I was KA9PGU. Well, because of financial problems (I was 13 and my folks weren't into it, etc, etc, etc) I had to let my ticket

expire. (To avoid flames, Yup, I could have renewed, but I didn't...)

Ok, now KA9PGU is 'sitting idle.' At least as far as I can tell.  
I know of at least 10 other people who aren't using their calls for various  
reasons (and they probably won't.)

So, my question is: can't the FCC re-assign said call to new hams?

Just kicking an idea around...

-mw-

N9UXC (and getting mileage out of this one...)  
whitemp@cnsvax.uwec.edu

-----  
Date: 6 Dec 93 15:42:20 GMT

From: ogicse!emory!europa.eng.gtefsd.com!howland.reston.ans.net!news.intercon.com!  
psinntp!arrl.org@network.ucsd.edu  
Subject: Wanted: 11C90 Prescalar Chip  
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, morris@ucunix.san.uc.edu (Ted Morris) writes:

>A buddy needs the 11C90 Prescalar Chip for the ARRL Handbook frequency  
>counter design--it's the -only- thing left he hasn't got. He's checked  
>what we feel are most of the "usual sources" (Jameco, MCM, etc., etc.)  
>and they either "don't stock them anymore" or have run out and don't  
>know if/when they'll ever get more. Even Debco here in town is "fresh  
>out."

Gee, nobody thought to ask US! :-).

The 11C90 was discontinued. Here are the possible sources we have located, but they will all dry up sooner or later.

-----  
The 500-MHz frequency counter was dropped from the 1992 Handbook because many of the parts had become difficult to locate. (We really did try hard to select components that would be around for a while!) These are the sources we were able to locate. If you find that any of these sources have "dried up", please send email to ehare@arrl.org (Ed Hare).

ICM-7226: Digikey, cat# ICM7226AIJL

11C90: Ramsey Electronics , Debco Electronics, Hamilton Avnet (11C90DMQB  
\$43.00 each - \$25.00 minimum credit-card order)

74S160 (substitute 74F160, 74HCT160 may work, 74LS160 good to 350 MHz):  
Digikey, cat # 74F160APC, Ocean State Electronics, cat# 74HC160, Jameco,  
cat# 74S160, cat# 74HC160

LM360: Digikey, cat# LM360N, Ocean State Electronics, cat# LM360N

## MAR-6 (substitute MSA-685), Microwave Components of Michigan (MCM)

Digikey, 701 Brooks Ave, Thief River Falls MN 56701, (800)-344-4539  
Hamilton Avnet, 1-800-332-8638

Jameco, 1355 Shoreway Rd, Belmont CA 94002, (415) 592-8097

MCM, POB 1697, Taylor MI 48180, (313) 753-4581 evenings only

Ocean State Electronics, POB 1458, Westerly RI 02891, (401) 596-3080

Ramsey Electronics, 793 Canning Pkwy, Victor NY 14564, (716) 924-4555

Debco Electronics, 4025 Edwards Rd, Cincinnati OH 45209, (513) 531-4499

王士林，男，1966年生，中共党员，大学本科学历，高级工程师，现任中国科学院遥感应用研究所所长。

The members and HQ staff would like to thank the following people for their contributions to this information file.

KA1CV

For more information about the study, please contact Dr. John G. Cawley at (609) 258-4626 or via email at [jcawley@princeton.edu](mailto:jcawley@princeton.edu).

Digitized by srujanika@gmail.com

Ed Hare, KA1CV  
American Radio Relay League  
225 Main St.  
Newington, CT 06111  
(203) 666-1541 - voice  
ARRL Laboratory Supervisor  
RFI, xmtr and rcvr testing

[ehare@arrl.org](mailto:ehare@arrl.org)

If you tie a strip of colored cloth to part of your body, the tribe acts differently!

Date: 6 Dec 93 21:53:53 GMT

From: ogicse!uwm.edu!math.ohio-state.edu!sdd.hp.com!hpscit.sc.hp.com!  
cupnews0.cup.hp.com!jholly@network.ucsd.edu

## Subject: Weird QRM

To: info-hams@ucsd.edu

david jerome adams (djadams@silver.ucs.indiana.edu) wrote:

: Greetings! I was working 80m the other night sending out my usual  
: 559 signal (I've GOT to get a better antenna up!), when I got a weird  
: sounding signal on my frequency. It sounded exactly like the annoying tone  
: you get when you leave the phone off the hook.

: Well...I thought this was strange so, I moved up about 10 khz to a clear  
: freq. Called QRL?...no answer...started tapping CQ...after about 3 calls,  
: it's back....moved back to my old freq...qrl...clear...cq a few times...  
: tone is back and LOUD!..changed a few more times and it kept following  
: me..I eventually turned the radio off in frustration...Does anyone know  
: what this might be?...or is it a who?

A friend? Sounds like someone giving you the RF raspberry.  
Jim, WA6SDM  
jholly@cup.hp.com

---

Date: 2 Dec 93 10:38:23 EST  
From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!math.ohio-state.edu!  
magnus.acs.ohio-state.edu!cis.ohio-state.edu!pacific.mps.ohio-state.edu!  
ohstpy.mps.ohio-state.edu!miavx1!miavx3.mid.@  
To: info-hams@ucsd.edu

References <holland-291193181932@right.dom.uab.edu>, <2dfjf0\$7is@oak.oakland.edu>, <36071@ksr.com>  
Subject : Re: using a radio off frequency in emergencies

In article <36071@ksr.com>, jfw@ksr.com (John F. Woods) writes:  
> prvalko@vela.acs.oakland.edu (prvalko) writes:  
>>Steve,  
>  
>>In a real life and death situation, do YOU really care?  
>  
>>I'd be happy to pay a \$10,000 fine, forfeit a rig or even a license if  
>>it meant saving my family.  
>  
> In a sense, this is what it all really comes down to.  
>  
> But it turns out that the Communications Act of 1934 authorizes \*anyone\*, not  
> just hams, to use any radio at their disposal in an emergency involving  
> possible loss of life if normal means of communication are unavailable.  
> However, you'll have to expect to prove that you had no realistic choice to  
> a skeptical court (as well as to a Sheriff's department that would probably  
> really like to keep the equipment they took even if they know darned well  
> that they aren't entitled to it...).

Why the Sheriff? and why a [presumed] local court? Aren't we talking Federal here? Isn't it reasonable to expect a Federal Court to be a niche above?

Sounds, to me, like we're beating a dead horse. Seems that 97.111(a)(2) and 97.403 focus squarely on the issue and provide the final, definitive, answer.

Now the disclaimer. I'm not an attorney ... just a "reader" of the rules.

Whatcha think ???

73 >< Carl  
K8NHE

---

Date: Mon, 6 Dec 1993 00:28:28 GMT  
From: netcomsv!netcomsv!cirrus!cserve2!ebs@decwrl.dec.com  
To: info-hams@ucsd.edu

References <1993Nov26.200816.19512@combdyn.com>, <754583670.19snx@mu.apana.org.au>, <1993Dec1.230224.1567@miavx3.mid.muohio.edu>  
Subject : Re: Calculating SWR

In article <1993Dec1.230224.1567@miavx3.mid.muohio.edu>  
clmorgan@miavx3.mid.muohio.edu writes:  
>In article <754583670.19snx@mu.apana.org.au>, jmorris@mu.apana.org.au (James Morris) writes:  
>> In article <1993Nov26.200816.19512@combdyn.com> lawrence@combdyn.com writes:  
>>>  
>>>How do you calculate SWR? I have a power meter...and I can measure the forward  
>>>and reflected power. How to I take the two values to determine the SWR?  
>>>  
>>>Right now I have forward power of 5 Watts and reflected power of 0.1 Watts,  
>>>what SWR would that correspond to?  
>>>  
>>>--  
>>>--EMAIL-----PHONE-----FAX-----  
>>> | WORK: lawrence@combdyn.com | (403)529-2162 | (403)529-2516 | CallSign  
>>> | HOME: dreamer@lhaven.uumh.ab.ca | (403)526-6019 | (403)529-5102 | VE6LKC  
>>>-----  
>>> disclaimer = (working\_for && !representing) + (Combustion Dynamics Ltd.);  
>>>  
>>  
>> I am not trying to be mean, but did you sit a radio theory test for your  
>> amateur license ?

```
>>
>> --
>> jmorris@mu.apana.org.au
>> James Morris  VK2GVA
>
>
> As I recall the (US) ham exams, this topic is not addressed ...
> is it in the Canadian exam? If so, at what level ??
>
> Just curious.
>
> 73 >< Carl
>      K8NHE
>
I'd like to expand on this last posting. I recently took and passed all
of the US amateur radio exams (Novice thru Extra class). To prepare for
these exams I purchased all of the ARRL License manuals.
```

The topic of SWR is mentioned several times in the above manuals,  
particularly in the Technician and General Class Manuals. In fact,  
2 formulas are given for SWR : (see Now Your Talking p7-7)

$$\text{SWR} = E_{\text{max}}/E_{\text{min}}$$

$$\text{SWR} = Z_0/R \text{ or } R/Z_0 \text{ (whichever is } >1)$$

These manuals also mention that a SWR of 3/1 will lead to a 1dB power loss. The Extra Class Manual also mentions the use of SWR circles on the Smith Chart.

Now, I happen to have a Masters Degree in EE and I design ICs for communications circuits on a daily basis. So, I am familiar with reflection coefficients and how you calculate SWR with them (though I must admit I forgot to take the sqrt of the power the first time I looked at this posting). I don't know how an average person who studies for and passes even the higher level license exams would be expected to know this.

I agree wholeheartedly with the feeling expressed by previous posters, that Ham operators in general and those in this newsgroup in particular should welcome any and all technical inquiries from fellow hobbyists who are trying to advance their technical skills. I think that our value judgements on the quality of the questions tends to discourage legitimate curiosities instead of encouraging it.

Just my \$.02 worth.

73,

Eric Smith

```
* * * * * * * * * * * * * * * * *  
* ^ *  
* Eric Smith <+> *  
* Design Engineer v *  
* Crystal Semiconductor *  
* Austin, Texas *  
* (512) 442-7555 X 363 *  
* ebs@crystal.cirrus.com *  
* *  
* * * * * * * * * * * * * * * * *
```

-----  
Date: Sat, 4 Dec 1993 22:13:28 GMT

From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!gatech!swrinde!sgiblab!  
pacbell.com!amdahl!netcomsv!netcom.com!btoback@network.ucsd.edu  
To: info-hams@ucsd.edu

References <754339940.AA01756@rochgte.fidonet.org>, <1993Nov30.030245.26209@newsgate.sps.mot.com>, <2dodur\$do2@vixen.cso.uiuc.edu>s  
Subject : Re: modifiable radios

In article <2dodur\$do2@vixen.cso.uiuc.edu> ah6542@ehsn2.cen.uiuc.edu (Allen John Hall) writes:

>I agree. One major question I have is:  
>(I mean I agree w/ the acceptable use of emergency comm out of  
>the ham band etc.)  
>back to the question:  
>Isn't it the cellular phone company's responsibility  
>to make sure their customers realize that their conversations  
>are NOT private- and that they CAN AND WILL be listened to? I  
>mean, really folks, congress just passed another law that saved  
>the big and powerful businesses (here the phone guys, other times  
>the coal/oil industries) a lot of money. If this law wasn't passed  
>poor little Mobile Link and Comm1 and all those other fellas  
>would have had to shell out Millions (maybe more) to make their  
>services more secure agains the general public. (Not to  
>mention that all the old cellular phones would be crap,  
>and that the new ones not only would cost more, but would  
>be a bigger).  
>

Actually, new all-digital technology will be used commercially for the first time next year (code-division multiple access). It'll be adopted because it's more reliable, better for data, and has higher capacity than the present analog system. Higher capacity means more revenue for the same capital outlay (from the service provider's point

of view), so there's a substantial incentive to get their customers to upgrade. Customers also have an incentive to upgrade because of the increased quality (far fewer drop-outs and much smoother cell handoffs), additional service (better for digital data), and improved secrecy (the digital format prevents casual listening with ordinary FM receivers, and even someone equipped with appropriate decoding equipment will be unable to listen to a conversation unless s/he hears the very beginning of the connection to a given cell).

>I think that the mobile-phone companies should explicitly say  
>that the phone calls are easily monitored by an FM receiver.  
>I have heard many many things before on cellular freqs.

For what it's worth, my cellular "startup package" from PacTel came with a supply of stickers saying "WARNING: This is a radio. Do not use for confidential conversations."

>thing that really supports my above sentence is that I once  
>heard Name, Mastercard Number, and Expiration date all give  
>out on the freq. -come on folks!- how easy can you make it  
>for someone to steal from you?!?

Note that the 49MHz band -- where most of today's cordless phones live -- is not protected, and anyone can legally listen. I don't understand how cordless phone users can imagine that their conversations are secret, given that there's an ANTENNA on the silly phone, but a ham acquaintance of mine recently helped the police wrap up a drug dealing operation this way. It seems his girlfriend had an apartment two doors down from the drug dealer, so he set up a scanner and voice-activated recorder on 49MHz. The result was two hours of drug deals on tape, ready for the DA. No search warrant needed, since the 49MHz frequencies aren't protected, except by the ordinary "secrecy of communication" law.

The new 900MHz cordless phones work in the 902-928MHz band.

-- Bruce Toback  
KN6MN

---

Date: 3 Dec 1993 21:54:47 GMT  
From: pravda.sdsc.edu!news.cerf.net!usc!sol.ctr.columbia.edu!news.kei.com!  
newsstand.cit.cornell.edu!newsstand.cit.cornell.edu!usenet@network.ucsd.edu  
To: info-hams@ucsd.edu

References <2dj38o\$5j5@orca.es.com>, <2dirce\$jup@wrdis02.robins.af.mil>,  
<1993Dec2.190057.2908@malins.mala.bc.ca>  
Subject : Re: using a radio off frequency in emergencies

In article <1993Dec2.190057.2908@malins.mala.bc.ca> DALE BABIY,  
babiyd@mala.bc.ca writes:

>  
>In my case, I believe that a human life comes above all else. If it ment  
>forking over my HT to save one, so be it. I believe it would be the  
>right  
>thing. Now as to weather its the legal thing, I'm not up enough on  
>the laws  
>to comment.  
>  
>> me? No legal advice expected, just interested on what the folks on  
>> the net may have to say.  
>  
>Do what you need to in order to save the life, otherwise you won't be  
>able  
>to look at yourself in the mirror in the morning.

When people ask about this I usually tell them that if they use the radio  
on police freqs directly that they should expect about at \$10K fine (and  
to  
create considerable delaying confusion as the police try to figure out if  
it  
is a prank) but if it's really a life at stake, I'm sure that that will  
not be  
a consideration. If the fine is an issue, then they should consider all  
other  
methods first. FWIW

Kevin, WB2EMS

---

End of Info-Hams Digest V93 #1431

\*\*\*\*\*  
\*\*\*\*\*